

SEQUENCE LISTING

(1) GENERAL INFORMATION:

- (i) APPLICANT: EIJSINK, VINCENT G.H.
BRURBERG, MAY B.
NES, INGOLF F.
- (ii) TITLE OF INVENTION: EXPRESSION SYSTEM IN MICROORGANISM AND
ITS USE FOR EXPRESSING HETEROLOGOUS AND HOMOLOGOUS
PROTEINS
- (iii) NUMBER OF SEQUENCES: 12
- (iv) CORRESPONDENCE ADDRESS:
(A) ADDRESSEE: BIRCH, STEWART, KOLASCH & BIRCH, LLP
(B) STREET: PO BOX 747
(C) CITY: FALLS CHURCH
(D) STATE: VA
(E) COUNTRY: USA
(F) ZIP: 22040-0747
- (v) COMPUTER READABLE FORM:
(A) MEDIUM TYPE: Floppy disk
(B) COMPUTER: IBM PC compatible
(C) OPERATING SYSTEM: PC-DOS/MS-DOS
(D) SOFTWARE: PatentIn Release #1.0, Version #1.30
- (vi) CURRENT APPLICATION DATA:
(A) APPLICATION NUMBER:
(B) FILING DATE:
(C) CLASSIFICATION:
- (viii) ATTORNEY/AGENT INFORMATION:
(A) NAME: MURPHY JR., GERLAD M.
(B) REGISTRATION NUMBER: 28,977
(C) REFERENCE/DOCKET NUMBER: 1380-0122P
- (ix) TELECOMMUNICATION INFORMATION:
(A) TELEPHONE: 703-205-8000
(B) TELEFAX: 703-205-8050

(2) INFORMATION FOR SEQ ID NO:1:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 26 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (iii) HYPOTHETICAL: NO
- (iv) ANTI-SENSE: NO
- (v) FRAGMENT TYPE: C-terminal
- (vi) ORIGINAL SOURCE:

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(A) ORGANISM: Lactobacillus platarum
(B) STRAIN: C11

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

Lys Ser Ser Ala Tyr Ser Leu Gln Met Gly Ala Thr Ala Ile Lys Gln
1 5 10 15
Val Lys Lys Leu Phe Lys Lys Trp Gly Trp
20 25

(2) INFORMATION FOR SEQ ID NO:2:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 114 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA (genomic)

(ix) FEATURE:

(A) NAME/KEY: CDS
(B) LOCATION: 1..114

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

ATG ATG ATA TTT AAA AAA CTT TCA GAA AAA GAA TTG CAA AAA ATA AAC 48
Met Met Ile Phe Lys Lys Leu Ser Glu Lys Glu Leu Gln Lys Ile Asn
1 5 10 15
GGT GGT ATG GCA GGA AAT AGT TCT AAT TTT ATT CAT AAG ATT AAA CAA 96
Gly Gly Met Ala Gly Asn Ser Ser Asn Phe Ile His Lys Ile Lys Gln
20 25 30
ATT TTT ACC CAT CGT TAA 114
Ile Phe Thr His Arg *
35

(2) INFORMATION FOR SEQ ID NO:3:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 38 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

Met Met Ile Phe Lys Lys Leu Ser Glu Lys Glu Leu Gln Lys Ile Asn
1 5 10 15
Gly Gly Met Ala Gly Asn Ser Ser Asn Phe Ile His Lys Ile Lys Gln
20 25 30

Ile Phe Thr His Arg *
35

(2) INFORMATION FOR SEQ ID NO:4:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 186 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA (genomic)

(ix) FEATURE:

- (A) NAME/KEY: CDS
- (B) LOCATION: 1..186

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:

ATG GAA AAG TTT ATT GAA TTA TCT TTA AAA GAA GTA ACA GCA ATT ACA 48
Met Glu Lys Phe Ile Glu Leu Ser Leu Lys Glu Val Thr Ala Ile Thr
1 5 10 15
GGT GGA AAA TAT TAT GGT AAC GGT GTA CAC TGT GGA AAA CAT TCA TGT 96
Gly Gly Lys Tyr Tyr Gly Asn Gly Val His Cys Gly Lys His Ser Cys
20 25 30
ACC GTA GAC TGG GGA ACA GCT ATT GGA AAT ATC GGA AAT AAT GCA GCT 144
Thr Val Asp Trp Gly Thr Ala Ile Gly Asn Ile Gly Asn Asn Ala Ala
35 40 45
GCA AAC TGG GCC ACA GGC GGA AAC GCT GGC TGG AAT AAA TAA 186
Ala Asn Trp Ala Thr Gly Gly Asn Ala Gly Trp Asn Lys *
50 55 60

(2) INFORMATION FOR SEQ ID NO:5:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 62 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:

Met Glu Lys Phe Ile Glu Leu Ser Leu Lys Glu Val Thr Ala Ile Thr
1 5 10 15
Gly Gly Lys Tyr Tyr Gly Asn Gly Val His Cys Gly Lys His Ser Cys
20 25 30
Thr Val Asp Trp Gly Thr Ala Ile Gly Asn Ile Gly Asn Asn Ala Ala
35 40 45
Ala Asn Trp Ala Thr Gly Gly Asn Ala Gly Trp Asn Lys *

(2) INFORMATION FOR SEQ ID NO:6:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 82 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

- (ii) MOLECULE TYPE: other nucleic acid
(A) DESCRIPTION: /desc = "Promoter"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:

GAGTTCTTAA CGTTAATCCG AAAAAAATA ACGTTAATAT TAAAAAATAA GATCCGCTTG 60
TGAATTATGT ATAATTTGAT TN 82

(2) INFORMATION FOR SEQ ID NO:7:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 81 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

- (ii) MOLECULE TYPE: other nucleic acid
(A) DESCRIPTION: /desc = "Promoter"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:

CGCATATTAA CGTTTAACCG ATAAAGTTGA ACGTTAATAT TTTTTTTGCG CAGAAATGGT 60
AAATTGAAGC ATAATAGTCT N 81

(2) INFORMATION FOR SEQ ID NO:8:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 82 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

- (ii) MOLECULE TYPE: other nucleic acid
(A) DESCRIPTION: /desc = "Promoter"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:

GCAGCATTAA CGTTAATTTT GATAACGTA ACGTTAATGG ATAATCATCC TGTTTACAAA 60
TAGTGTATGA CATAATTAAG TN 82

(2) INFORMATION FOR SEQ ID NO:9:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 81 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: other nucleic acid

- (A) DESCRIPTION: /desc = "Promoter"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:

TTGATATTAG CGTTTAACAG TTAAATTAAT ACGTTAATAA TTTTTTTGTC TTAAATAGG 60
GATTTGAAGC ATAATGGTGT T 81

(2) INFORMATION FOR SEQ ID NO:10:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 84 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: other nucleic acid

- (A) DESCRIPTION: /desc = "Promoter"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:10:

ATTTTTTTGT CTTTAAATAG GGATTTGAAG CATAATGGTG TTGAAATAAT TCCTCCGTAC 60
TTCAAAAACA CATTATCCTA AAAG 84

(2) INFORMATION FOR SEQ ID NO:11:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 83 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: other nucleic acid

- (A) DESCRIPTION: /desc = "Promoter"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:11:

GAAATAATTC CTCCGTACTT CAAAAACACA TTATCCTAAA AGAATATAAT GATAAAAGAT 60
TGTACTAAAT CGTATAATGA CAG 83

(2) INFORMATION FOR SEQ ID NO:12:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 80 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: other nucleic acid

- (A) DESCRIPTION: /desc = "Promoter"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:12:

AAAAATTTAC AGTTAAGAAT AAAAAACGAC TAGTTAAGAA AAATTGGAAA AATAAATGCT 60
TTTAGCATGT TTAATATAAC 80
